



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

**MEMORANDUM:**

To: Bonaventure Akinlosotu

From: Clayton Myers, Entomologist

Date: September 12, 2011

Subject: PRODUCT PERFORMANCE DATA EVALUATION RECORD

DP barcode: 390084  
Decision no.: 448515  
Submission no: 895080  
Action code: R340  
Product Name: CHEMSICO Insect Granules LH  
EPA Reg. No or File Symbol: 9688-232  
Formulation Type: Broadcast Granules

Ingredients statement from the label with PC codes included: Lambda-cyhalothrin (0.1%):

Application rate(s) of product and each active ingredient (lbs. or gallons/1000 square feet or per acre as appropriate; and g/m<sup>2</sup> or mg/cm<sup>2</sup> as appropriate): Broadcast, 2 lb product per 1000 sq. feet (9.8 grams/ square meter)

**I. Action Requested:** Data was submitted to support additional claims on a product.

**II. Background:** The registrant seeks to amend the label of a lambda-cyhalothrin granular product to include claims against quickly killing fire ant mounds/queen/colony, with residual efficacy claims up to 3 months.

**III. MRID Summaries: (Primary Reviews attached)**

**a. MRID 48470601**

(1) Non-GLP

(2) A field study was conducted to test the efficacy of Chemsico Insect Granules LH (lambda cyhalothrin 0.1%), applied as a broadcast treatment, against red imported fire ants, *Solenopsis invicta*. 4 1000 sq ft. plots were laid out in a field infested with active RIFA mounds, which were marked within the plots. There were 4-5 mounds in each plot. 3 of the plots were treated with the product at the label rate of 2 lb/1000 square feet using a hand-held granular applicator. The 4<sup>th</sup> plot was left as an untreated control. RIFA activity was assessed at 1 and 2 weeks after treatment. After 2 weeks, the inactive mounds were excavated to observe the presence of any dead fire ant queens.

(3) Authors conclude that efficacy is supported for RIFA, as 100% of treated mounds were controlled within 2 weeks of treatment. Untreated mounds were still active. Additionally, at 2 weeks, dead workers and winged alates were found at the treated sites. The primary reviewer agrees that this study is adequate to support.

(4) The study is acceptable to support the proposed claims against controlling/killing the queen and entire mound, for up to 3 months.

#### IV. RECOMMENDATIONS:

(1) Labeling:

*(a) What pests and site/pest combinations may be added as follows to the label based on the submitted or cited data?*

N/A, as only new marketing claims are proposed for claims against pests already approved for the label

*(b) What pests and site/pest combinations must be removed from the label?*

None

*(c) List changes to the directions for use:*

None

*(d) List changes to the optional marketing claims:*

The proposed claims as listed are acceptable, except that "season-long" control claims must all be qualified with the disclaimer of a 3 month duration. This includes the newly added season long claims, and the ones that existed previously on the approved label. "Season-long" is not appropriate as a stand-alone claim, as the length of 'seasons' may vary in different climates. Such a stand-alone claim can only be supported with adequate 12 month residual control data. A number of the optional marketing claims list the 3 month duration with the words 'season-long' in brackets, as optional text. This is an acceptable way that season-long can be expressed, as it must be qualified to convey it means 3 months. All other references to 'season-long' control on the labelling must be modified to include this qualifier, or alternatively, must be deleted from the product label.

## TASK 2 DATA EVALUATION RECORD

### STUDY TYPE: Product Performance

**MRID: 484706-01. Evaluation of the Efficacy of a Granular Lambda Cyhalothrin 0.1% Insecticide Forulation by Broadcast Treatment for the Control of the Red Imported Fire Ant (RIFA) (*Solenopsis invicta* Buren) in Cabo Rojo, Puerto Rico**

### OCSPP 810.3100. Soil Treatments for Imported Fire Ants

**Product Names: Chemsico Insect Granules LH**

**EPA Reg. No.: 9688-232**

**Decision number: 448515**

**DP number: 390084**

Prepared for  
Registration Division (7505)  
Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Washington, DC 20460

Prepared by  
Summitec Corporation  
Task Order No. 2-21

Primary Reviewer:  
Dennis M. Opresko, Ph.D.

Signature:   
Date: AUG 26 2011

Secondary Reviewer:  
Gene Burgess, Ph.D.

Signature: Gene Burgess, AE  
Date: AUG 26 2011

Robert Ross, M.S., Program Manager

Signature: Robert H. Ross  
Date: AUG 26 2011

Quality Assurance:  
Angela Edmonds, B.S.

Signature: Angela Edmonds  
Date: AUG 26 2011

**RECOMMENDED CLASSIFICATION:**

**Partially acceptable**

### Disclaimer

This review may have been altered subsequent to the contractors' signatures above.

Summitec Corp. for the U.S. Environmental Protection Agency under Contract No. EP-W-11-014

## DATA EVALUATION RECORD

[Primary Reviewer's Name]

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<b>STUDY TYPE:</b>	PRODUCT PERFORMANCE
<b>MRID:</b>	<b>484706-01.</b> Evaluation of the Efficacy of a Granular Lambda Cyhalothrin 0.1% Insecticide Formulation by Broadcast Treatment for the Control of the Red Imported Fire Ant (RIFA) ( <i>Solenopsis invicta</i> Buren) in Cabo Rojo, Puerto Rico.
<b>DP BARCODE:</b>	390084
<b>DECISION NO:</b>	448515
<b>SUBMISSION NO:</b>	895080
<b>SPONSOR:</b>	United Industries Corp., P.O. Box 142642, St. Louis, MO 63114.
<b>TESTING FACILITY:</b>	Ecosan Environmental Services, Mayaguez, Puerto Rico.
<b>STUDY DIRECTOR:</b>	Paul L. Schoenberg
<b>SUBMITTER:</b>	Eric D. Smith
<b>STUDY COMPLETED:</b>	19/03/2011
<b>CONFIDENTIALITY CLAIMS:</b>	None
<b>GOOD LABORATORY PRACTICE:</b>	The study detailed in this report was not conducted fully under Good Laboratory Practice regulations, 40 CFR Part 160, pursuant to Section 160.3. The GLP Regulations do not require a Product Performance Study to be conducted under GLP Guidelines unless it is specifically required under Section 158.640 (Only Antimicrobial and Vertebrate Control Agents are listed). This study does not fall into that category. No Quality Assurance Audit was conducted during the conduct of this study and protocols were not approved in writing prior to the initiation of the study.
<b>TEST MATERIAL:</b>	PRODUCT NAME: Chemsico Insect Granules LH REGISTRATION NUMBER: 9688-232 ACTIVE INGREDIENTS: lambda -Cyhalothrin (0.1%)  PRODUCT APPLICATION RATE(S): 2 lb of product per 1000 sq ft (9.8 g/m <sup>2</sup> ). ACTIVE INGREDIENT APPLICATION RATE(S): Not



reported

**PROPOSED LABEL  
MARKETING CLAIMS:**

Kills Queen and Colony [Fast].

**EPA REQUESTS:**

[EPA WILL ADD DIRECTIVES HERE]

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**STUDY REVIEW**

**Purpose:** To test the efficacy of Chemsico Insect Granules LH (lambda cyhalothrin 0.1%), applied as a broadcast treatment, against red imported fire ants, *Solenopsis invicta*.

**MATERIALS AND METHODS**

**Test Location:** Club Deportivo del Oeste, Cabo Rojo, Puerto Rico.

**Test Material(s):** Chemsico Insect Granules LH (lambda cyhalothrin 0.1%)

**Test Species Name, Life Stage, Sex and Age:** Red imported fire ants, *Solenopsis invicta* Buren.

**Test containers, chambers and/or apparatus (include site description and location) and how experiment was conducted:** A total of four 1000 sq ft plots were laid out on the field. Individual active RIFA mounds were marked with surveyor flags within the plots. There were 5 mounds in Plot A, 4 in Plot B, 4 in Plot C and 5 in Plot D. Plots A, B, and C were treated with the product at a rate of 2 lb/1000 sq ft using a hand-held granular applicator. Plot D was the untreated control. RIFA mound activity was assessed at one week and at 2 weeks after treatment. After 2 weeks, the inactive mounds were excavated to observe the presence of any dead fire ant queens.

**Treatments, including untreated control:** 2 lb of product per 1000 sq. ft. plot (9.8 g/m<sup>2</sup>).

**Number of replicates per treatment:** Three

**Number of individuals per replicate:** NA

**Length of exposure to treatment (time in seconds, minutes or hours):** Single broadcast application.

**Were tested specimens transferred to clean containers?** NA

**Experimental conditions:** Soil conditions were very dry. One day after product application a brief shower occurred. Weeds varied considerably among plots.

**Data or endpoints collected/recorded:** Percent reduction of active RIFA mounds.

**Data analysis:** No statistical analysis of the results.

## **RESULTS**

Table 1 summarizes the results of the trial.

**Table 1. Percent Reduction of active RIFA Mounds in 1000 sq ft plots one and two weeks after broadcast treatment with 2 lb lambda cyhalothrin granules**

<b>Plot</b>	<b># RIFA Mounds per plot</b>	<b>1 Week</b>	<b>2 Weeks</b>
Plot A	5	20%	100%
Plot B	4	75%	100%
Plot C	4	75%	100%
Plot D (control)	5	0%	0%

### **Study Author's Conclusions**

No new RIFA mounds were recorded in any of the plots. After 2 weeks the inactive mounds were excavated and no live ant activity was recorded.

### **Reviewer's Conclusions**

Results support the label claim that the product "kills queen and colony fast." A Certificate of Analysis was not provided to verify that the a.i. was present in the test product at the concentration stated.

### **Reviewer's Recommendations**

Partially acceptable. Although the results support the label claim, a Certificate of Analysis was not provided to verify that the test product contained the active ingredient at the stated concentration.